Seat No.: _		Enrolment No		
		GUJARAT TECHNOLOGICAL UNIVERSITY		
		M.E –I st SEMESTER–EXAMINATION – JULY- 2012		
Subject code: 712701N Da		ode: 712701N Date: 05/07/2	012	
Subj	ect N	Name: Wireless Communication Network		
Time: 2:30 pm – 05:00 pm		30 pm – 05:00 pm Total Marks	: 70	
Instr	ucti	ons:		
		empt all questions.		
		Make suitable assumptions wherever necessary.		
3.	Figu	ares to the right indicate full marks.		
Q.1	(a) (b)	What are different Challenges for Wireless Communication? Explain. Explain Randomly Addressed Polling (RAP) protocol operation with an example.	07 07	
Q.2	(a) (b)	Write a short note on Advanced Mobile Phone System (AMPS). What are different multiple access techniques for wireless systems? Explain any one in detail.	07 07	
		OR		
	(b)	Draw and explain cdmaOne protocol architecture.	07	
Q.3	(a) (b)	Explain GSM network architecture with necessary diagram. Briefly explain the concept of Software Defined Radios (SDR) and intelligent antennas for 3G cellular systems. OR	07 07	
Q.3	(a)	Explain different methods for charging in mobile networks?	07	
Q.O	(b)	What are advantages and disadvantages of simulation of wireless network system?	07	
Q.4	(a)	What are different characteristics of satellite communication systems that differentiate them both from wired and other kinds of wireless links?	07	
	(b)	Explain in brief. Enlist the main characteristics of Geosynchronous Earth Orbit (GEO). Also explain properties of geostationary satellites.	07	
Q.4	(a) (b)	OR Draw and explain a simple OFDM system. What are different attacks on wireless networks? Explain in brief.	07 07	
Q.5	(a) (b)	With an example, explain Local Multipoint Distribution Service (LMDS). What are benefits and applications of wireless LANs?	07 07	
Q.5	(a)	OR Draw and explain wireless ATM protocol architecture.	07	
V .3	(a) (b)	What are the issues that need to be taken into account when designing a Personal Area Network (PAN)?	07	
